

ABSTRACT

A method for controlling access by processes running on a host device to a communication network includes assigning to each of the processes a respective doorbell address on a network interface adapter that couples the host device to the network and allocating instances of a communication service on the network, to be provided via the adapter, to the processes. Upon receiving a request submitted by a given one of the processes to its respective doorbell address to access one of the allocated service instances, the adapter conveys the data over the network using the specified instance of the service, subject to verifying, based on the doorbell address to which the request was submitted, that the specified instance was allocated to the given process.